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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,510	11/26/2003	Terry L. Cooke	HE0209	1833
21495	7590	06/30/2005	EXAMINER	
CORNING CABLE SYSTEMS LLC			LEPISTO, RYAN A	
P O BOX 489			ART UNIT	
HICKORY, NC 28603			PAPER NUMBER	
			2883	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/724,510

Applicant(s)

COOKE ET AL

Examiner

Ryan Lepisto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-7 and 9-21 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-3 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Giebel et al (US 5,863,083)** (Giebel), and further in view of **Heagy et al (US 2002/0033554 A1)** (Heagy).

Giebel teaches a pulling grip (Figures 1-7) for installing a pre-connectorized fiber optic cable (22) having a terminated end (part of 46) with fiber optic connectors (20) mounted upon the ends of respective optical fibers (18), the pulling grip comprising: a furcation plug (46) attached to the terminated end of a fiber optic cable (part of 46); a pulling grip housing (6) for receiving and temporarily storing the furcation plug (46), the fiber optic connectors (20) and the ends of the respective optical fibers (18); and a pulling grip sleeve (2) comprising a bag (2) that is adapted to be opened to position the pulling grip sleeve(2) over the pulling grip housing (6) and the furcation plug (46) and to be closed around the pulling grip housing (6) and the furcation plug (46) to install the fiber optic cable (22); wherein the pulling grip sleeve (2) is removable from the fiber optic cable (22) once the fiber optic cable (22) is installed (column 7 lines 7-10), wherein the pulling grip housing (6) has a first housing portion (14) that defines an elongate

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channel (24) for routing the optical fibers (18) and a second housing portion (16) that defines a plurality of pockets (42) that each store a plurality of the fiber optic connectors (20).

Giebel also teaches a pulling grip (Figures 1-7) for installing a pre-connectorized fiber optic cable (22) having a terminated end with fiber optic connectors (20) mounted upon the ends of respective optical fibers (18), the pulling grip comprising: a furcation plug (46) attached to the terminated end of a fiber optic cable (22), a pulling grip housing (6) for receiving and temporarily encasing the fiber optic connectors (20), the optical fibers (18) and at least a portion of the furcation plug (46), the pulling grip housing (6) having a first housing portion (14) defining an elongate channel (24) for routing the optical fibers (18) and a second housing portion (16) defining a plurality of pockets (42), each pocket (42) for storing a plurality of the fiber optic connectors (20); and a pulling grip sleeve (2) adapted to be positioned over the pulling grip housing (6) and at least a portion of the furcation plug (46), wherein the pulling grip housing (6) is formed by a molded clamshell defining a hinge line (44) that separates the first housing portion (14) and the second housing portion (16) and wherein the first housing portion (14) and the second housing portion (16) are folded about the hinge line (44) to temporarily encase the fiber optic connectors (20), the optical fibers (18) and at least a portion the furcation plug (46), wherein one of the first housing portion (14) and the second housing portion (16) has a lengthwise groove (40) and the other comprises a lengthwise tongue (38) that engages the groove (40) to thereby secure the first housing portion (14) and the second housing portion (16) together in a closed configuration, and

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wherein the first housing portion 914) comprises a continuous first flange (34) and a plurality of discontinuous second flanges (32) and wherein the optical fibers (18) are routed lengthwise underneath the first flange (34) and between a pair of adjacent second flanges (34) into one of the pockets (42) (column 5 lines 39-50).

Giebel does not teach expressly a longitudinally zipper openable bag or a specific teaching in the disclosure of a means for integrating the furcation plug with conventional communications hardware.

Heagy teaches an apparatus for installing various linear materials or tubes or devices wherein a protective covering (Fig. 19) that has an eye that a line handle is tied to so the covering and the contents the covering is protecting can be pulled through spaces. The bag has an opening from the near the top to the bottom (longitudinally and lengthwise) that is closed or opened via a zipper (paragraph 0135).

Giebel and Heagy are analogous art because they are from the same field of endeavor, installing linear (tube like) (including cables or fibers, paragraph 0134) components through confined spaces using components to protect the linear structures.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a protective covering with the longitudinally and lengthwise zipper opening as taught by Heagy for the connector housing as taught by Giebel.

At the time of the invention, it would have also been obvious to a person of ordinary skill in the art that the furcation plug section (46) taught by Giebel has a shape that allows it to be integrated with conventional communications hardware. For

example, the plug shape allows the plug to be attached via a clamp and screw to a mounting bracket or via plastic wire ties.

The motivation for doing so would have been to reduce or eliminate damage to the components the covering is protecting and to improve the ability to insert components into the cover before they are installed (Heagy, paragraph 0135).

***Allowable Subject Matter***

2. **Claims 4-7 and 9-21** are allowed.

The following is an examiner's statement of reasons for allowance:

With regard to claims 4, 9-10 and 19: These claims are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a pull grip housing with a plurality of pockets that each store a plurality of fiber optic connectors, the plurality of individual pockets connected by a flexible rod or a furcation plug with engaging grooves to restrain lengthwise movement and rotation of the plug relative the pull grip housing, in combination with the rest of the claimed limitations.

With regard to claims 5-7, 11-18 and 20-21: These claims are allowable over the prior art of record because they depend on allowable claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-4 and 8 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments, filed 20 May 2005, with respect to claim 10 have been fully considered and are persuasive. Giebel does not teach nor would it have been obvious to one of ordinary skill in the art to use a plurality of pockets that each holds a plurality of fiber optic connectors.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Lepisto whose telephone number is (571) 272-1946. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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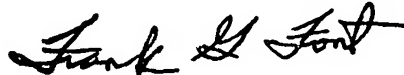
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ryan Lepisto

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Date: 6/22/05



Frank Font

Supervisory Patent Examiner

Technology Center 2800